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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Varga

Examiner: TBA

Serial No.: 10/001,696

COPY OF PAPERS  
ORIGINALLY FILED

Group Art Unit: 2121

Filed: October 31, 2001

For: **APPARATUS AND METHOD FOR IMPROVED VENDING MACHINE IVENTORY  
MAINTENANCE**

Attorney's Docket No. 4763-013B

**RECEIVED****MAR 29 2002****Technology Center 2100**Assistant Commissioner of Patents  
Box PATENT APPLICATION  
Washington, D.C. 20231**PRELIMINARY AMENDMENT**

For this continuation application of currently pending Serial No. 09/427,954, which is a continuation of U.S. Patent 6,181,981, please make the following amendments to the specification and claims. If any additional fees are required in association with this amendment, the Commissioner is hereby authorized to charge them to deposit account 50-1732.

**In the Specification**

Please insert the page entitled "Appendix - Computer Source Code" before the computer source code in the appendix.

This page was filed in the original application and does not constitute new matter.

Respectfully submitted,

**WITHROW & TERRANOVA, PLLC**By: 

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Date: March 11, 2002

Attorney Docket No.: 4763-013B

# Office Action Summary

Application No.  
09/386,183

Applicant(s)

Ro

Examiner

Vincent Boccio

Group Art Unit  
2615

☐ Responsive to communication(s) filed on \_\_\_\_\_

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-3, 5-10, and 12-47 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-3, 5-10, and 12-47 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☒ received in Application No. (Series Code/Serial Number) 08/498,585.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 2

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

**DETAILED ACTION**

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2615.

**Claim Rejections - 35 USC § 112**

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 10, 12-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 10 is recites the limitation "said decoded data" in line 7.

There is insufficient antecedent basis for this limitation in the claim.

Claims 12-13 are now depending from canceled claim 11 and therefore are not dependent upon an existing claim and fails to further limit any claims and are considered indefinite in view thereof.

**Claim Rejections - 35 USC § 102**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:  
A person shall be entitled to a patent unless --  
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 1-3, 5-7, 10, 12-47 are rejected under 35

U.S.C. 102(e) as being anticipated by Takahashi et al. (US 5,966,495).

Regarding claims 1 and 14-15, Takahashi et al. in Figs. 1, 4, 8, 12, 16, discloses and meets the limitations associated with a recording and reproduction apparatus corresponding to a method(Fig. 1) for recording and reproducing at least one of audio and video signals comprising: a data recording unit for recording at least one of audio and video signals(see Fig. 1, "Audio Signals L & R @ input points 1 and 2" and "Video Signal @ input point 3" and see associated recording unit elements 4-19 etc."); a data reproduction unit for reproducing at least one of audio and video signals(see "Video and Audio Monitors 30, 31-L and 31-R", also see associated reproduction processing elements etc. "21-33"); a separable storage unit(see "Main Memory 18", and col. 9, lines 44-45, "...exchange of IC cards", therefore the utilization of a exchangeable/separable IC card memory, as disclosed as is well known in the art) for storing data from the data recording unit and outputting stored data through the data reproduction unit; wherein the data reproduction unit includes, a key input unit(see "operating Key") for selecting a mode according to the function of a keyed input(see Figs. 15, 19, col. 10, lines 30-64 and col. 15, line 39 to col. 16, line 18); a controller for encoding and decoding an input signal(user input

key determination for the desired operation of the user Recording and reproduction as specified by the user) according to the output of the keyed input unit(see Fig. 1, "19", Figs. 4, 8, 12, 16 Operating Key 46, col. 10, lines 56-63, "photography key (not shown) contained in the operating keys 46, the system controller 45...."); and a display (see Fig. 1, "video monitor 30") for displaying data searched (see Fig. 11 for example etc.) according to the output of the controller.

Regarding claims 2-3 and 16-19, Takahashi et al. Fig. 1 further discloses and meets all the limitations as recited: a data selector(User Input) for selecting a mode(modes are recording and reproduction of specified data) and data according to the control of the controller; a system controller for generating clock and control signals according to output of the data selector(see "system controller 16" in association with memory controller 17 controlling the memory 18 based on the user inputs from the user input device 19 as shown in Fig. 1); a data compressor(see "4, 5, 6, 7, 8, 9 10 and 11") for converting an input analog signal to a digital signal and compressing and a memory control for generating memory control signals and addresses; a memory(18) for storing and an interface for performing input and output operations(see interfacing elements as shown in Fig. 1 for memory 18) as claimed in claim 2, further

a D/A converters(28 and 29) and a display(20), as claimed in claim 3.

Claims 5 and 21-22 are analyzed and discussed with respect to the claims above, but claim 5 recited additional elements such as: wherein the separable storage unit includes, a memory array(met by IC card which is an array of memory locations identified by addresses); an address generator(see Fig. 21 a & b, Fig. 28 a & b addresses are generated for the memory by an address generator, also see Fig. 2 a, b, c, d and col. 7, lines 25-29) for generating addresses for specifying regions of the memory array(see "main memory 18", col. 9, line 44, "IC Card"); a data interface unit for performing input output operations on data stored in the memory array; and a control unit for controlling the address generator and data interface unit(see Fig. 1, "System controller 16, Memory Controller 17, Memory Information Generating Circuit of Memory 18 which the memory is interfaced with interfacing units when recording and reproducing including "Data Distributing Circuit", when outputting from memory and input interface in view of elements 12, 14 and 16", with user interface display and key sections 20 and 19 to the system controller to the memory controller and memory and other interfacing elements for performing recording as well as searching using index information generated to selectively reproduce audio, video, audio and video etc. as desired and

dictated by the user thru the user interface keys, display provided).

Claims 6-7 and 20 are analyzed and discussed with respect to the claims above but claim 6 further recites additional limitations such as: reading and displaying a content table of data stored in the storage unit is the keyed input is determined as a search signal (see col. 14, lines 7-18, "... a search is made for a variation point of a desired index level in step S 111 and S 112 ... content title is displayed on the display (not shown) the retriever selects an index corresponding to the desired data to be retrieved" and col. 14, lines 65 to col. 15, line 8); further including processing steps of D/A conversion of input data {see D/A converters 4-6}; encoding {see encoders 10 and 11} and storing the encoded data in the separable storage unit 18, as disclosed.

Regarding claim 10, Takahashi et al. further discloses and meets the limitations of D/A converting, decoded data and outputting(see D/A converters 28, 29 L & R, decoding circuits 24 and 25 and outputting elements 30 and 31 L & R).

Regarding claims 12-13, Takahashi et al. further meets the limitation of unpacking the compressed data(decoding), restructuring the unpacked data(de-blocking process opposite of blocking  $8 * 8$ ) inverse sub-band coding into the time

domain(inverse DCT), all met in view of MPEG compression processing and decompression.

Claims 24-47 are analyzed and discussed with respect to the claims above.

**Claim Rejections - 35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (US 5,966,495).

Regarding claims 8-9, Takahashi et al. discloses MPEG compression, compression of audio and video, and meets the limitations sub-band-sampling (met by the DCT, which is inherent to MPEG) and further the quantization and coding and packing of the coded data as claimed in claim 7, and further restructuring a frame of video met in view of a blocking circuit {such as an 8 \* 8 array}, as claimed in claim 7, but fails to particularly disclose quantizing and coding the sub-band-sampled data, as claimed in claim 7, and further the detection of motion thereby generating motion vector data transforming and coding the motion data into data of specific frequencies.

The examiner takes official notice that quantizing after sub-band sampling is well known and conventional in the art,



further the generation of motion data {motion vectors}, coding the data of specific frequencies is also conventional and well known, which are considered obvious and well known steps and elements for compression of audio as well as video information, as is well known to those skilled in the art.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify Takahashi et al. by incorporating compression of audio by quantizing after sub-band sampling, as claimed in claim 7, and to provide elements for detection of motion transforming and coding the motion data to the MPEG compression element as disclosed, wherein these elements are well known and obvious compression elements and steps associated with compression system of audio and video data, well known to those skilled in the art.

**Contact Fax Information**

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 308-9051, (for formal communication intended for entry)

**or:**

(703) 308-5359, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

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Art Unit: 2615

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Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent F. Boccio whose telephone number is (703) 306-3022.

If any attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Wendy Garber, can be reached at (703) 305-4929.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

V.F.B. *VFB*  
November 18, 2000

  
VINCENT F. BOCCIO  
PRIMARY EXAMINER